Volunteer Firemen

Professional Journal of the Volunteer Firemen's Section of the National Fire Protection Association

Volume 1, Number 7 **BOSTON, MASSACHUSETTS** **April, 1934**

Courtesy N. B. F. U.

Fire Fighting by Volunteers

Organization Is What Counts — Even Limited Apparatus Is Better Than None

THE picture above tells its own story. Without organization or apparatus a few neighbors are frantically trying to fight a fire. Lack of equipment other than buckets, and no plan of attack, make the willing efforts futile. This picture is one of the best ever taken as an argument for an organized fire department. What volunteer department, even the poorest equipped, would not be working more intelligently and with greater effect than the bewildered individuals who are shown there struggling with an almost certain disaster?

No community need be without a fire department. A few citizens who are willing to share responsibility can organize a volunteer company. Even the act of organization alone is a step ahead, as it provides a means of concerted action in an emergency. The purchase of some apparatus gives it tools with which to work. Many departments started with a few pump cans on a truck. No department should be ashamed of such modest begin-

Courtesy W. G. Blasingame.

The all-volunteer Cape Charles (Virginia) Fire Co. No. 1, Inc. (Member N.F.P.A.), boasts a *genuine* "Texaco Fire Chief." He is Charles Adkins, salesman for Texaco Fire Chief gasoline, and is shown in the picture above in front of company headquarters.

nings. Ever the most limited equipment is far better than none. Later a small pumper may be added and other equipment which will permit the company to enlarge its membership, build a fire station and become a substantial fire fighting unit. The provision of water supplies and fire alarm facilities are next steps in the fire protection of the community.

It is one thing to have the men and apparatus and another to make real fire fighters and a real fire department out of them. The time and effort which are put into planning for fires determine how good the department may be. The officers must have a plan *worked out before the fire* for every important building to which the department may be called. The members of the department must drill frequently so that the laying of hose, raising of ladders, spreading salvage covers and other fire fighting operations can be performed smoothly and without delay.

It is these things which make the well-organized volunteer fire department a far cry from the old "bucket brigade."

About Grass Fires

THIS is the time of year when fire departments are run ragged answering calls to various outdoor fires, mostly grass, brush and rubbish. A study which has been made of grass and brush fires in various cities over a period of several years brings out some very interesting facts about this type of fire.

1. They occur during certain seasons only; for example, they appear to come in the spring before vegetation has turned green. They also occur in the late fall and also during winters where there is no snow on the ground.

2. They occur only on dry days. Charts of rainfall and the frequency of grass fires have been made in a number of communities from which it is evident that by watching weather conditions it is possible to determine on what days grass fires will occur.

3. They occur in the same locations year after year and in closely grouped localities; in other words, the same patch of meadow, swamp or other area which gave your department trouble last year or the year before is likely to give trouble again this year.

4. These fires occur in the daytime and most frequently in the hours from noon to five o'clock in the afternoon.

Some communities make a practice of burning over or clearing vacant lots and fields of tall grass. Some fire departments also have special apparatus for handling grass fires.

A plan of organizing a fire department patrol of those parts of the community which have fires year after year has been suggested. This patrol might be made up by regular firemen, by volunteers or Boy Scouts working in shifts. In operation each patrol would cover a route which had been chosen after a study of the location of such fires over a period of several years. The patrolman would cover every part of the area assigned to him about once every half hour or oftener during the period from about 10 A.M. to dusk. The patrol, of course, would only go out on days when weather conditions made grass fires likely. The members of the patrol could do the work on bicycles or in a light car.

International.

The $1,000,000 fire which destroyed a large linoleum plant at Paulsboro, N. J., February 8, 1934. It was fought under the severe handicaps of zero weather and inadequate water by the two volunteer fire companies of Paulsboro and six outside companies from Woodbury, National Park, Gibbstown, Clarksboro, Mount Royal and Swedesboro.

1934 Fire Schools Get Under Way

20,000 Volunteer Firemen Will Take Advantage This Year of Training Programs in Over 40 States

THERE are going to be a lot of new regional fire schools, available this year for the first time, which will bring training facilities within reach of an increased number of volunteer firemen. While any figure is something of an estimate, on the basis of the attendance at last year's schools, it is probable that at least 20,000 volunteer firemen will participate in the activities of these schools.

The first regional school to get under way has already been held at Ponca City, Oklahoma, a two-day session on March 8 and 9. An attendance of 70 included Oklahoma firemen, mostly volunteers, as well as a number from near-by Kansas towns.

The Oklahoma schools are cooperative efforts of the State Firemen's Association, the Oklahoma Inspection Bureau and the Department of Vocational Education of the Agricultural and Mechanical College located at Stillwater. The Department of Vocational Education has provided a permanent instructor for these schools, an experienced fireman. Before this issue appears, the second of Oklahoma's regional schools will have been held at Bartlesville on March 22 and 23.

Plans are now definite for many of the schools in some of the states, and at the end of this article as much information as is now obtainable about the schools is given. It is still early in the year and dates and places for many of the schools to be held in the summer and fall have not been set as yet. The volunteer who reads this and wants to know what schools are to be held in his neighborhood should inquire of one or another of the following sources near by, all of which are agencies in the respective states actively sponsoring the schools or cooperating: State Firemen's Association, Fire Chiefs' Association (also in many cases, county firemen's organizations), State Fire Marshal's Office, Insurance Inspection Department, State College or University, State Department in charge of vocational education, League of Municipalities, State Fire Prevention Committee.

A popular set-up for the schools in many states is to provide an annual short course in conjunction with the meeting of the State Firemen's Association or State Fire Chiefs' Association. This is done in such states as Louisiana, New Mexico, North and South Carolina, South Dakota, Vermont, Wisconsin, Wyoming, and Washington.

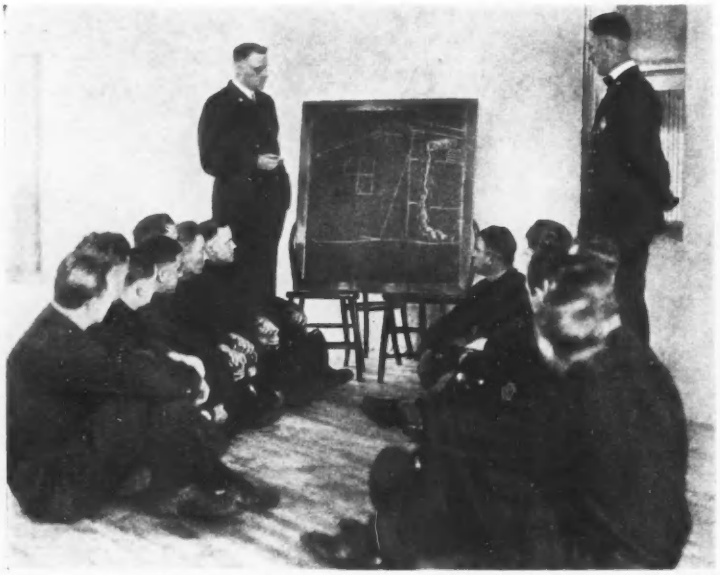
Ten years ago the State College at Ames, Iowa, and the University of Illinois at Champaign-Urbana, Illinois, sponsored three-day "Short Courses" for firemen during the summer. This plan has been extended to numerous other states, such as Maryland, Minnesota, and Texas. In a number of states, such as Indiana, Kansas, Michigan, Ohio, and West Virginia, these schools are being supplemented this year by regional schools.

Hose and ladder drill at the Michigan Short Course. Practicing the proper way to carry a hose line to an upper story over a ladder.

Fire Marshal's offices are active in promoting the establishment of the schools. One of the most active is Fire Marshal Clem Smith of Indiana, who has organized sixteen regional schools covering all parts of the state. In all states having such an officer, the fire marshal is active in connection with the schools. In California the State Fire Marshal's office employs a full-time instructor for firemen training conferences.

A major contribution to the technique of these firemen's training schools has been made by the Federal and State vocational training departments. The Federal vocational training authorities made studies of the fireman's job in coöperation with the Los Angeles Fire Department several years ago, and have promoted fireman training work by the vocational training agencies provided in most states. Their special contribution has been the development of a plan of teaching. The plan is one especially useful in volunteer work, since it does not depend on having a special force of instructors but develops them from within the groups of men who receive the training.

A typical application of this procedure is that adopted in Delaware. In each county in Delaware a conference was organized by the State Board of Vocational Training. To this conference most fire companies in the county (all volunteers, Delaware having only one full-paid fire department—that at Wilmington) sent leaders. These leaders learned a method



In more than a dozen states full-time instructors, experienced firemen, are provided by the State Vocational Training department, State Fire Marshal's office, Insurance Inspection Bureau, State University or other agency. These men are available on request to volunteer departments for several days at a time to conduct conferences or drills.

of teaching and increased their general knowledge of fire department practices and, returning to their several companies, were able to arrange an instruction program in each company. On a larger scale the plan was applied in Massachusetts, where instructors for ten zone schools were developed by this method from the fire departments themselves.

Municipal leagues have also been very coöperative. Two good examples are the conference of mayors in New York State and the League of Municipalities in Virginia, which have been helpful in organizing the elaborate system of zone schools in these states.

In numerous states full-time instructors are being provided by one or another of the coöperating organizations. In Texas and Oklahoma, for example, the state college has furnished a man. The insurance inspection departments have not only allowed their chief engineers and other members of their technical staffs to spend considerable time assisting in these training programs, but particularly in the middle-western states have provided drillmasters available to fire departments on request for training work.

In Arizona the State Department of Vocational Training, at the request of, and in coöperation with the State Firemen's Association, maintains a training program with four traveling instructors who are carrying out a schedule, started last fall and which will extend through this June, which will provide one or more sessions at each of the 28 fire departments in the state.

So there's going to be plenty of opportunity this year for any volunteer who wants to take advantage of the training facilities. Most of the schools available are listed following:

ARIZONA. Courses are given in different cities and villages, the customary course consisting of 3-hour evening periods over a two weeks' period.

CALIFORNIA has a highly developed program. Officers' conferences and Fire Department Instructor's Courses were given to groups of firemen from 47 departments in 1933 by a full-time instructor of the State Department of Education in coöperation with the State Fire Marshal's office. This work is being continued this year.

COLORADO. School sessions will be held during annual meeting of Colorado State Firemen's Association, which is tentatively scheduled for the first part of July at Canon City.

DELAWARE. The State Board of Vocation Training has organized leader training conferences in each of the three counties, New Castle, Kent and Sussex. Twenty-five of the volunteer departments who sent leaders to these conferences last year have organized their own conferences and training periods.

FLORIDA. The Florida Fire College is to be held July 9, 10 and 11 at Daytona Beach.

INDIANA. The State Fire School is to be held Friday, April 13, at Purdue University at West Lafayette as a part of the meeting of the Indiana Section of the American Water Works Association. Regional Fire Schools are planned and the following dates tentatively determined in the following school centers: Evansville, May 8-11; Jeffersonville, May 15-18; Lawrenceburg, May 22-25; Columbus, May 28-June 1; Bloomington, June 5-8; Vincennes, June 12-15; Terre Haute, June 19-22; Richmond, June 26-29; Muncie, July 2-6; Marion, July 10-13; Kokomo, July 17-20; Logansport, July 24-27; Fort Wayne, July 31-August 3; Elkhart, August 7-10; South Bend, August 14-17; LaPorte, August 21-24.

ILLINOIS. The Tenth Annual Illinois Fire College of the Illinois Firemen's Association is to be held June 19-22 by the University of Illinois at Champaign-Urbana.

IOWA. The Annual Firemen's Short Course will be held May 22 to 25 at the State College at Ames. Regional schools are also contemplated.

KANSAS. Regional Fire Schools are planned, one to be held May 24 and 25 at Emporia, and June 6 and 7 at Pratt. The Sixth Annual Short Course will be held at Abilene, August 20-22 inclusive. Another regional school may be held in northwestern Kansas in the fall.

LOUISIANA. The Fourth Louisiana State Firemen's Association Short Course in Firemanship is to be held April 16-21 at Baton Rouge.

MARYLAND. The Fifth Annual Short Course for Firemen is to be held September 4-6 at the University of Maryland at College Park.

MASSACHUSETTS. Courses consisting of 30 two-hour sessions each are to be given at the zone schools into which the state has been divided, starting on the following dates: Brookline, March 10; Springfield, March 17; Lowell, March 24; Worcester, March 31; New Bedford, April 7; Brockton, April 7; Haverhill, April 14; Pittsfield, April 21; Falmouth, April 28; and Arlington, March 28. An instructors' conference will be held at Worcester during the summer.

MICHIGAN. The Michigan State Fire College is to be held at Manistee during the week of July 15-21. A number of zone schools are also to be conducted at dates not yet set.

MINNESOTA. The Seventh Annual Northwest Fire School is to be held at the University of Minnesota in the early part of September. This school is not wholly local to Minnesota, but draws attendance from North and South Dakota, Wisconsin, and Canada.

MISSISSIPPI. Zone schools are being planned, dates not yet set.

MISSOURI. A zone school will be held May 16-17 at Joplin. The Southeast Mississippi Fire Fighters' Association will hold their Fifth Annual school at Caruthersville about August 15-16. The second Missouri Central Fire School will be held at Columbia, covering advanced subjects, about September 19-20.

NEW JERSEY. An Instructor Training Conference was organized last summer by the volunteer departments of Sussex County and conducted by the Vocational Division of the State Department of Public Instruction. The Vocational Division will conduct similar conferences this year for volunteer groups requesting them.

NEW MEXICO. The Fifth Fire College of the New Mexico State Firemen's Association will be held May 28-30 at Roswell.

NEW YORK. Training facilities for firemen of cities and villages of the State are provided under a plan for regional fire schools sponsored by the New York State Conference of Mayors and the New York State Association of Fire Chiefs. The following cities, which have adequate training towers, have been designated zone centers, and schools will be held at these during the year: Albany, Binghamton, Buffalo, Elmira, Glens Falls, Gloversville, Ithaca, Mount Vernon, New Rochelle, Ogdensburg, Poughkeepsie, Rochester, Syracuse, Troy, Utica, Watertown, White Plains, and Yonkers.

Nassau County has established its own fire training system. Under the direction of the Nassau County Board of Vocational Education and Extension, a traveling instructor has been provided who is available to departments in the county for training work.

NORTH CAROLINA. The 1934 Fire College and Drill School will be held at Durham, May 8-10.

OHIO. The State Fire School will be held at Ohio State University at Columbus, June 26-28, 1934. A program for several regional schools is being considered for this year, dates and places not yet set.

OKLAHOMA. Regional fire schools are tentatively scheduled as follows: McAlester, April 5 and 6; Ardmore, April 19 and 20; Mangum, May 3 and 4; Alva, May 17 and 18.

OREGON. The Oregon Fire Chiefs' Association school will be held in June, place not yet set.

PENNSYLVANIA. A regional fire training school is to be held at the State Teachers College at California, Pennsylvania, August 3-4.

SOUTH CAROLINA. A state fire school will be held at Columbia in May.

SOUTH DAKOTA. The Fifth Annual South Dakota Fire School will be held at Yankton, June 4-8.

TENNESSEE. It is planned to hold several regional schools in the state during 1934, but dates have not been set.

TEXAS. The Fifth Annual School for Texas Firemen is to be held at the Agricultural and Mechanical College of Texas, College Station, July 16-19. The state provides a full-time instructor.

UTAH. A program of 132 lessons in ten different fire departments near Salt Lake City is being completed this month under the sponsorship of the Utah State Firemen's Association.

VERMONT. The second Annual Firemen's Training School is to be held. Place and date yet to be set.

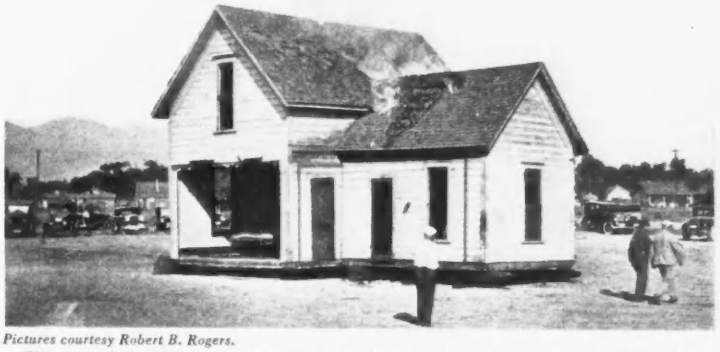
VIRGINIA. The state has been divided into 20 training zones. An instructors' training school will be held, probably in Richmond, for the instructors at the zone schools. Dates have not yet been set.

WASHINGTON. The annual fire school will be held conjunctively with the meeting of the Washington State Firemen's Association at Vancouver, July 26, 27 and 28. The State Fire Marshal's department is making a drillmaster available to volunteer departments during April, May and June. Regional schools will be held as follows: Kent, April 3 and May 2; Anacortes, April 5 and May 4; Yakima, April 10; Chehalis, April 13; Kalama, May 4; Spokane, May 14-16; and Cashmere, June 19.

WEST VIRGINIA. West Virginia University is conducting the following regional fire schools during April, 1934: Charleston, 2nd and 3rd; Clarksburg, 4th and 5th; Morgantown, 6th and 7th; Martinsburg, 9th and 10th; Wheeling, 12th and 13th. The Fourth Annual State Fire Service Extension School will be held at West Virginia University, Morgantown, July 30-August 2 inclusive.

WISCONSIN. The annual school of the Badger Firemen's Association, the Wisconsin Firemen's Association, and a new organization of volunteer firemen in the northwestern part of the state will be held this year, date to be announced. The Wisconsin Inspection Bureau maintains a fire department instructor who will conduct schools or conferences in various communities on request.

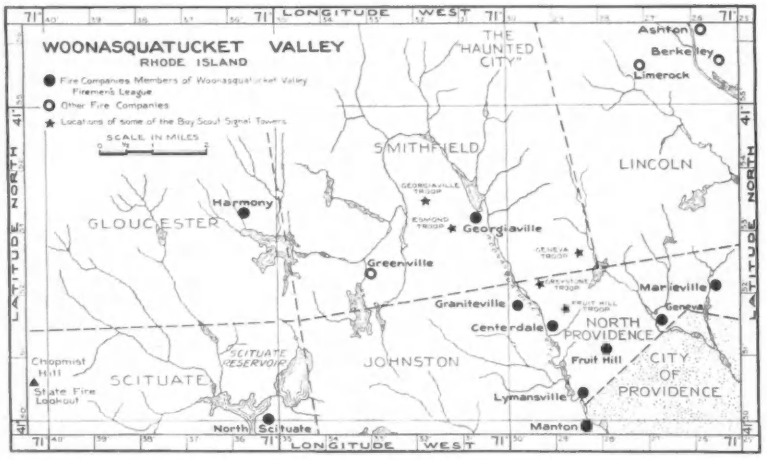
WYOMING. The annual school is to be held at Wheatland, date to be set.



Pictures courtesy Robert B. Rogers.

The typical dwelling set on fire for a fire-fighting demonstration at the Annual Fire School of the Washington State Firemen's Association at Yakima last summer. Dwelling had been moved to the middle of a park to avoid exposing other buildings. Picture shows fire just after it was started on the wooden shingle roof. One room wall cut away for demonstrating salvaging operations.

After entire roof and attic were involved (about 13 minutes), fire company 2½ blocks away was called. Men responded, laid two 1½-in. lines from 350 ft. of 2½-in. hose and, using one small line inside and one outside, controlled fire in 3½ minutes. In spite of disadvantage of bad smoke conditions, the inside line was the most effective one.



A Forest Fire Signal Corps

Boy Scouts Help Work of Directing Volunteer Departments at Woods Fires

By Willard B. Hall

Chairman, Engineering Committee Woonasquatucket Valley Firemen's League

THE forest fire wardens were worn to a frazzle in the woods fire season of 1932 trying to get information about fires through the "Haunted City" district in the Woonasquatucket Valley of Rhode Island, where bad fires start and are hard to fight. Valuable time was wasted trying to keep scattered groups of firemen informed and effective in that terrain where swamps seem to stop the men more than they do the fires.

During the 1933 season the Boy Scouts of that district provided a Signal Corps for the firemen and wardens of the Woonasquatucket Valley Firemen's League. If tradition is a force in men's lives, it would seem that they are only carrying out the tradition of a neighborhood that has long been associated with both fire prevention and forestry. About 100 years ago a prominent mill owner in that section, a Zachariah Allen, began the movement for fire protection and fire prevention work as we know it today by making an intelligent study of the fires in his mills and adopting measures for good housekeeping to prevent fires and providing water supplies, hose equipment and fire brigades to fight fires. Later he became interested in scientific forestry, and his experiment on some land near one of his mills not only was the first of its kind but also a financial success. Later, the firemen of the district formed the Woonasquatucket Valley Firemen's League and, studying how to protect the country that includes the old Allen mills and his wood-lot, have made a lot of improvements in rural fire-fighting methods. Now the Scouts have taken to the brush to serve as real scouts for the fire-fighting army in the war which is being won to keep the woodlands green.

All boys thrill at the chance to fight fire, but it is hardly safe for them to work close up to the line of a forest fire. On the other hand, the tired fire warden is often at a loss to know what is going on along his battle-front, since different units of men can get so out of contact that their efforts in fighting the fire are wasted and their work hampered.

The valley is so full of smoke from its mills, and those in Providence just beyond, that observers at state lookout towers at Woonsocket Hill (about 7 miles north of Georgiaville) and at Chopmist Hill cannot be sure of them before they develop into fairly large fires. To spot these fires quickly Boy Scouts have built six towers in the valley and two others at North Scituate. Lookouts on these towers, on high ledges and in the tops of high pine trees, have kept such a keen watch that not a fire last year went unnoticed long enough to do any material damage.

The guards at the "Haunted City" were from Troop No. 3 of North Providence, and their headquarters was a woodchopper's shanty, where they live when on their week end hikes. Last year they were ready to signal with their flags from one ledge to another and then across the valley, but this year they hope to have a short wave radio set in service.

The Esmond troop erected a 16-foot wooden tower on a high ledge that is in plain sight from the Forest Warden's house and overlooks the whole east slope of the valley. The oak and hickory poles were hoisted up over the rocks with a block and fall and put together with lag bolts. In the fire season a flag flies from a short pole at the top of the tower so the other stations can quickly spot the lookout and his companion, who send their messages from the top floor. Just under them is the "chart floor" with a table and a map like those used in the state fire lookout towers.

While on the subject of maps, it may be well to suggest one method which appears feasible for accurately transmitting locations of fires. The topographic maps of the U. S. Coast and Geodetic Survey, which show all geographic features as well as highways and railroads, are generally used by forest fire observers in spotting fires. These maps show latitude and longitude lines at 5-minute intervals. By use of a simple scale which can be made on a piece of tracing cloth, locations may be closely indicated by giving the latitude and longitude readings from the maps.

For example, on the accompanying map the figures 71° 31′ 10″ west longi-

tude and 41° 53′ 05″ north latitude will locate the Esmond Troop Tower. The same method has been used to list locations of water holes and will be applied this coming year in other aspects of forest fire work.

Another busy troop was Troop No. 1 of Geneva. They built two towers and organized a bicycle patrol during the woods fire season which "killed" four fires. They seem to have taken first honors for being on the job. Several of them assigned to lookout duty on a certain day left a scout jamboree in Providence at 11 P.M. and hiked two miles from the car line to the tower, where they slept the rest of the night in order to be on the lookout early the next morning. It is years since this neglected corner of the district has seen such an insignificant woods fire damage.

The Fruit Hill troop had a varied set-up that aimed to protect a state park. The "crow's nest" lookout was in a tall white pine where the boy could not wave a signal flag, so he was supplied with a telegraph key that led to a ledge, where signals could be exchanged with a tower near the troop cabin. The Greystone troop spotted a fire from their tower and had a fire company put it out before the Esmond and Fruit Hill troops could get the true location. The Georgiaville troop built the largest tower, locating it in the middle of a section noted for its fires.

The North Scituate set-up was separate from the rest and was under way unknown to the district council before the idea was proposed by the engineering committee of the Firemen's League. They had two towers that covered woodland which is in a dip near to the state tower, but hidden by an intervening hill.

The towers are standing and this spring will be put into service by crews with a season's experience on lookout, keen to make this season better than last. Forest fire service badges have been fastened to the troop flag in each troop that took part last year, but everyone knows that seven service badges will not be enough this year.

Pyrene Prize Letter Contest

Best Letters on Actual Fires Put Out With Fire Extinguishers Will Win Awards

CO-OPERATIVELY with the Pyrene Manufacturing Company of Newark, N. J., VOLUNTEER FIREMEN is offering cash prizes each month for the best letters written by volunteer firemen giving actual cases where approved fire extinguishers of any make have saved lives or property.

The sort of letter which is wanted is something like the one which is presented in the next column as a sample.

No doubt every reader of VOLUNTEER FIREMEN has used a fire extinguisher to save either life or property at some time. By putting the essential features of the story into a short letter, you can make yourself eligible for the following cash prizes which will be awarded each month until further notice: First Prize, $10.00; Second Prize, $3.00; Third Prize, $2.00.

The contest will be judged by the engineering staff of the National Fire Protection Association and the editors of VOLUNTEER FIREMEN. Read the simple rules below which must be carefully followed in order that your entry may get full consideration.

CONTEST RULES

1. Only members of a volunteer fire department may compete in the Pyrene Prize Letter Contest.
2. Letters are to describe actual experiences where any approved fire extinguisher of any make has saved lives or property.
3. Trade names may be used but will be deleted in publication. Publishers reserve the right to edit winning letters to permit publication.
4. Each contestant automatically vouches for the truth of the facts presented from his own or others' experiences.
5. Only one letter may be submitted each month.
6. Letters must be legibly written in ink or typewritten on white paper, one side only. Preference will be given to letters not over 250 words in length.
7. Letters received after the 20th of the month will be judged in following month's competition.
8. Monthly prizes in cash will be: 1st, $10.00; 2nd, $3.00, and 3rd, $2.00.
9. Address contest letter to Pyrene Prize Letter Contest, National Fire Protection Association, 60 Batterymarch Street, Boston, Mass.

Each month the following prizes will be awarded:

First Prize
$10.00

Second Prize
$3.00

Third Prize
$2.00

Here's Kind of Letter Which Will Win Prizes

On March 16 my next door neighbor, Mr. W. J. Jones, 123 Jones Street, Jones City, Ill., learned something about fire protection when there was a fire at the garage where he works.

Bill's helper was cleaning some motor parts with gasoline. Suddenly there was a flash as the gasoline ignited, probably from a spark from the brush.

Bill ran and grabbed a fire extinguisher. It was a 2½-gallon foam type. He tipped it over and first put the fire out on the motor and then on the floor. The pail of gasoline had also flashed, so he shot the stream at the edge of the pail so the foam flowed over the gasoline. It was out in a few seconds.

That night when Bill came over to tell me about it he was puzzled about so much foam (he called it suds) coming out. So I explained to him how a foam extinguisher only had about 2½ gallons of liquid that expanded and made about 20 gallons of foam that cuts off air and smothers the fire.

The Empire Garage, where the fire occurred, was built last year and cost $15,000. There were twelve cars in it at the time. So this extinguisher saved a good many thousand dollars.

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Volume 1 **April 1934** Number 7

The Annual Meeting The National Fire Protection Association will hold its thirty-eighth annual meeting at Hotel Haddon Hall, Atlantic City, New Jersey, from Monday, May 14, through Thursday, May 17, 1934. We extend a cordial invitation to the members of our Volunteer Firemen's Section and to all volunteer firemen to attend the sessions. Member departments and companies have received copies of the program of the meeting. We will gladly send a copy to any one interested for the asking. A formal meeting of the Volunteer Firemen's Section has not been arranged. We have no desire to compete with the state, regional and county meetings of volunteer firemen. If a sufficient number of volunteer firemen register for the meeting, an informal separate conference will be conducted. There are many items of interest to volunteer firemen scheduled on the general program.

A conference of state and city fire marshals will be held on Monday, May 14th, at which volunteer firemen will be welcome and where such important subjects as arson control, school safety, work of state fire prevention associations, and government unemployment relief projects on fire safety will be discussed.

The general N.F.P.A. sessions start on Monday evening and run through Thursday. An evening of interesting motion pictures of fires and fire prevention is arranged for Tuesday.

Fire Commissioner McElligott of New York City will talk on "The Responsibility of the Citizen to the Fire Department." A prominent authority from the Pacific Coast will discuss the fire hazards due to earthquakes. There will be important talks on "Auxiliary Water Supplies for Rural Fire Protection" and on "Static Electricity as a Fire Cause." Many important committees of the Association will present their reports. Among those of particular interest to volunteer firemen will be the reports of the Committees on Field Practice, Fire Prevention and Clean-Up Campaign, Farm Fire Protection, Forest, Dust Explosion Hazards, Manufacturing Risks and Special Hazards, and Flammable Liquids. The meeting is annually an exposition of the best thought on all phases of fire protection and fire prevention.

There are thousands of volunteer firemen within easy reach of Atlantic City in such states as New Jersey, New York, Pennsylvania, Delaware, and Maryland. Any volunteer fireman that can take the time to attend all or part of the meeting will receive a most cordial welcome and we believe will feel well repaid for coming. We repeat that full information on the meeting can be had for the asking, and we confidently look forward to a representative gathering of volunteer firemen at the convention.

Massachusetts Water Holes In the February issue of VOLUNTEER FIREMEN the project undertaken in Massachusetts to spend C. W. A. money on the construction of sites for fire department pumper suction in rural districts now remote from water supplies for fire protection was described.

Although the work in Massachusetts was confined to the five counties in the southeastern part of the state only, the figures recently reported to the Massachusetts State Fire Prevention Committee by Stanley M. Brown, director of the project, reveal the tremendously important results of the work. Property to the value of more than $14,000,000 has been furnished with protection which it did not previously have. Although it is scarcely three months since the project was started, estimated figures on fires reported where the water sites have been available show that fire losses of $110,000 have been prevented. This is considerably more than the cost of building the sites. According to these figures the work has already paid for itself.

Let's Have Your Ideas on Care of Hose The N.F.P.A. Committee on Field Practice has especially asked that we request our members and readers of VOLUNTEER FIREMEN to let the committee have the benefit of their experience in the proper methods for the care of fire hose.

In order to furnish a basis for discussion, the committee has prepared a preliminary text on the care of fire hose which will be published as one of the advance committee reports to be submitted to the annual meeting in May. The text covers the keeping of records on hose, its housing, its care on fire trucks and in use at fires, testing, washing and drying. The care of nozzles and auxiliary hose equipment is also discussed.

The committee is planning to circulate this report during the year, hoping that by next year enough comments will have been received so that all important features on the care of fire hose may be covered when the committee report is issued as an official N.F.P.A. document. We would consider it a favor if readers of VOLUNTEER FIREMEN would write asking for copies of "Advance Report —Care of Fire Hose," and after reading it carefully, send in suggestions. The advance report will be sent on request without charge.

Another Thousand New Members

SINCE the last issue, volunteer firemen members of fire companies and departments from all over the United States and Canada, to the number of more than a thousand, applied for membership in the Volunteer Firemen's Section of the National Fire Protection Association, showing a steadily increasing interest in the new organization. The following companies and departments making up this thousand new members come from twenty-three states, Alaska, and Ontario and Saskatchewan.

The Fourth Thousand

Carmel Fire Department, Carmel, California
Captain Put Engine Company, Danielson, Connecticut
Lewiston Fire Department, Lewiston, Idaho
Lansing Volunteer Fire Department, Lansing, Illinois
Lockport Fire Department, Lockport, Illinois
Neponset Community Fire Company, Neponset, Illinois
Steger Fire Department No. 1, Steger, Illinois
Vinton Volunteer Fire Department, Vinton, Iowa
Ashland Fire Department, Ashland, Kansas
Thibodaux Fire Department, Thibodaux, Louisiana
Community Fire Company, Inc., Linthicum Heights, Maryland
Takoma Park Volunteer Fire Department, Takoma Park, Maryland
Alert Hose Company, Adams, Massachusetts
Hemlock Fire Department, Hemlock, Michigan
Excelsior Volunteer Fire Department, Excelsior, Minnesota
Windom Volunteer Fire Department, Windom, Minnesota
Aurora Volunteer Fire Department, Aurora, Nebraska
Friend Fire Department, Friend, Nebraska
Greeley Hose Company No. 1, Greeley, Nebraska
Hay Springs Volunteer Fire Department, Hay Springs, Nebraska
O'Neill Volunteer Fire Department, O'Neill, Nebraska
Audubon Volunteer Fire Company No. 1, Audubon, New Jersey
Eagle Hook and Ladder Company, Metuchen, New Jersey
Port Reading Fire Company No. 1, Port Reading, New Jersey
Arkport Hose Company No. 1, Arkport, New York
Depew Fire Department, Depew, New York
Pine Plains Hose Company No. 1, Pine Plains, New York
Solvay Fire Department, Solvay, New York
Mooresville Volunteer Fire Company, Mooresville, North Carolina
Arcadia Community Fire Company, Arcadia, Ohio
Beaver Township Volunteer Fire Department, North Lima, Ohio
Trilby Volunteer Fire Department, West Toledo, Ohio
Lakeview Fire Department, Lakeview, Oregon
Wasco Volunteer Fire Department, Wasco, Oregon
Friendship Fire Company; Linwood, Pennsylvania
McAllen Volunteer Fire Department, McAllen, Texas
Overton Volunteer Fire Department, Overton, Texas
White Deer Volunteer Fire Department, White Deer, Texas
Charlottesville Fire Department, Charlottesville, Virginia
Waterville Volunteer Fire Department, Waterville, Washington
Salem Volunteer Fire Department, Salem, West Virginia
Basin Volunteer Fire Department, Basin, Wyoming
Anchorage Volunteer Fire Department, Anchorage, Alaska
Humber Bay Volunteer Firemen, Humber Bay, Ontario
Rosetown Fire Brigade, Rosetown, Saskatchewan
Wilkie Volunteer Fire Brigade, Wilkie, Saskatchewan

MEMBERSHIP PLAN

Volunteer Firemen's Section National Fire Protection Association

WHERE twenty or more firemen in a volunteer company or department affiliate with the Volunteer Firemen's Section the cost is 50 cents a year *per man*. Each fireman will receive one copy of VOLUNTEER FIREMEN, the monthly journal of the Volunteer Firemen's Section, mailed regularly to his home address. The company or department automatically becomes a member of the National Fire Protection Association and is entitled to full privileges of membership. All the literature regularly issued to N.F.P.A. members is mailed to headquarters of the company or department.

Membership may be applied for by one member of the company or department collecting 50 cents for each of the 20 or more members and making a single remittance for the group, or the company or department may take a membership for its men and make a single remittance from the company or department treasury.

Companies of Less Than Twenty

Because of the large amount of material mailed to members, not less than $10.00 can be accepted from any company or department for membership dues. In the case of companies or departments with less than twenty men this means that the cost divided among them will be slightly higher per man. Of course, some such companies or departments may prefer to make a single remittance of $10.00 from the company or department treasury. In other cases a few interested citizens, not members of the company or department, may be glad to contribute 50 cents apiece to make up the required minimum of twenty, so that the members may secure the rate of 50 cents per man.

These companies or departments have full privileges of N.F.P.A. membership as above and each member receives the monthly magazine, VOLUNTEER FIREMEN, at his home.

It's a Wonder Somebody Did Not Think of This!

"VOLUNTEER" FIRE DEPT. ALARMS

In many places the Waterworks, in the event of fire, immediately INCREASES THE WATER PRESSURE on the mains.

Astonishing as it may seem, but because water is practically an INCOMPRESSIBLE FLUID, the increase in pressure reaches all parts of the system almost instantaneously.

The Town of Fulton, Ky., writes to say:

"We have several of these alarms now working in Fulton which have worked perfectly since installed. Our town maintains a pressure of 60 pounds at all times for domestic purposes and in case of fire our pressure is increased to 90 pounds. In one particular case, on account of elevation, the pressure stands at 30 pounds and this fireman's alarm gauge is set at 40 pounds and the instant the pressure is raised for fire service this alarm sounds within from 15 to 25 seconds."

Towns that depend upon Volunteer fire service find even a big siren may not awaken firemen in the late hours of the night, but this automatic alarm will turn them out ☞ as it will continue to sound until shut off.

A fine thing for the Chief's Home, the City Hall Depts., the Police Dept., etc.

The cost is surprisingly low. We furnish the Electric Contact Pressure Gauge. Any kind of a 6-Volt bell will do. For current use a Bell Transformer (110 to 6 Volts, or there may be one all ready to use) or 3 or 4 ordinary dry cells. It will work either way. It's very compact; the accurate little gauge is only about 2½" diameter. Gauge can be placed in basement, right close to pipe and wires run to bell, wherever you want it. ☞ Tell us your ordinary water pressure and we will set them right for you.

☞ Price includes Gauge accurately calibrated with built-in electrical contacts and shut-off cock.

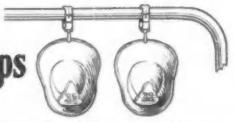
No. VC994. Volunteer Fire Alarm Gauges, each..... **$3.95**

Strap your helmet safely to the truck railing or hold-on bar. All helmets have a dee ring for this very purpose.

Our snap-hook is swiveled, the buckle strong and the leather good. The cost is not much. Nickel Plated.

No. VD111. Helmet Straps, each.....**$0.27**
No. VD112. Helmet Straps, per dozen. **2.92**

FIREMEN'S Helmet Straps



☞ WRITE FOR NEW CATALOG SHOWING MANY INTERESTING FIRE ITEMS.

W. S. DARLEY & CO.

2810 WASHINGTON BOULEVARD CHICAGO, ILL.

Letters to the Editor

National Fire Protection Association,
Boston, Mass.

I wish to congratulate you on the magazine, VOLUNTEER FIREMEN; it certainly fills a place that has been a long time vacant. The men of this department are taking a great interest in the paper. We hold a monthly oral examination and discussion on the different articles, which have proved very interesting and instructive. While we don't always agree with some of the methods of fire fighting, they make very good material for discussion and point the way for us to improve our own methods.

L. L. MOHR, Chief,
Fire Department, The Dalles, Ore.

* * *

National Fire Protection Association,
Boston, Mass.

The writer has reviewed with much interest the copy of VOLUNTEER FIREMEN which came along with your letter. We believe that you have come across a very effective way for tying in the great host of volunteer firemen of this country, who in so far as a real and national effort ever having been made by our outstanding leaders and fire protection societies to elicit their greatest interest, and to challenge them to measure up to the great opportunity for service which is theirs, have been the "forgotten man" and are entitled to a new deal.

E. T. HOLMAN, Chief Inspector,
Tennessee Inspection Bureau,
Nashville, Tenn.

* * *

National Fire Protection Association,
Boston, Mass.

I have received two copies of VOLUNTEER FIREMEN and must say that it is worthy of its name. The articles in the publication are very good and are educational and inspirational. I have passed the copies around to other members of our company and they are very enthused over the paper. I am certainly glad that you are organizing such a publication, as the volunteer fireman is one person who has not been in the limelight. However, they are coming to the front more and more every day and deserve more recognition.

HERBERT W. STUTZ, President,
Pitsburg Rural Fire Co.,
Pitsburg, Ohio.

* * *

National Fire Protection Association,
Boston, Mass.

I surely enjoyed your January and February numbers of VOLUNTEER FIREMEN, and was somewhat surprised to see my good friend President Archbold [Egyptian Fire Fighters' Association of Southern Illinois] disagree with Chief Rogers of Seattle in his illustration of breaking and making couplings. While I agree with Mr. Archbold in regard to the statement that drills should be standard, yet I feel that it is just these little things that keep them from being so. Everybody wants their own little way.

Personally speaking, I must say I absolutely agree with Chief Rogers' method in both making and breaking.

President Archbold wants the man to almost squat down, as it were, with the hose across his knees. This, to my mind, would be more dangerous to the man than if he were straddling the hose. In making the coupling, a man should always face the way the water comes, in which position the coupling makes up very easily, and with his back to the engine or hydrant when breaking.

Why should a man want to see what is taking place there when the line is being made up? He does not need to do so, if things are being done efficiently, and I venture to say that the man in the semi-sitting posture and at the side of the hose has just as little chance of seeing what is doing on if he is attending to his work.

I might say we use this method, as described by Chief Rogers in the January number of VOLUNTEER FIREMEN, all over this District.

I notice seventy fire department instructors met in St. Louis in January last. Could these men not get busy on the standard of fire brigade work as spoken of by Mr. Archbold?

WILLIAM HARDY, Chief,
Fire Department, Lethbridge, Alberta.

In the Current N.F.P.A. Publications

The April QUARTERLY

Volunteer companies or departments members of the Volunteer Firemen's Section receive the QUARTERLY *at company headquarters in addition to* VOLUNTEER FIREMEN *which each member receives at his home address by reason of membership in the section.*

Fire Losses and Fire Causes

The official tabulation of fire losses for the years 1921-1932 with charts to show the relative importance of the various fire causes, including statistical proof of the increasing efficiency of fire departments in the steadily decreasing percentage of the losses charged to conflagrations and exposure fires.

Bakery Fires

An analysis of 760 fires in bakeries, showing how the fires start, how they spread and how they are extinguished.

Annual Sprinkler Tables

Tables showing the performance and efficiency of automatic sprinklers in 217 different occupancy classifications, showing the value of this form of protection for varying degrees of fire hazard and giving detailed explanation of the small percentage of cases where sprinklers have not been successful.

Molasses Tank Explosions

Molasses tanks are not ordinarily considered dangerous, but on rare occasions they "explode." This article by a distinguished chemist explains the reasons.

The Forest Fire Danger Meter

Description by a representative of the U. S. Forest Service of a simple meter which determines the degree of forest fire hazard just as photographers use an exposure meter to time their picture.

Accounts of Important Fires

The complete story of the Paulsboro, N. J., $1,000,000 fire, a picture of which is given in this issue of VOLUNTEER FIREMEN and was fought by an all-volunteer force. Also complete details of the Anderson, Indiana, store and telephone exchange fire, and the $1,000,000 department store fire in Birmingham, Alabama.

ADVANCE REPORTS of N.F.P.A. Technical Committees

With the April NEWS LETTER, volunteer companies or departments members of the Volunteer Firemen's Section were sent a list of Technical Committee Reports available to members, together with a post card for requesting copies of those wanted for review in advance of the annual meeting, when they will be presented. Reports this year cover the care of fire hose, fumigation, municipal fire alarm systems, rural and forest fire fighting apparatus, and other interesting subjects. A complete list will be sent to any reader on request.

Executive Office

NATIONAL FIRE PROTECTION ASSOCIATION

60 Batterymarch Street, Boston, Massachusetts

THROW AWAY YOUR SODA-ACID CHARGES

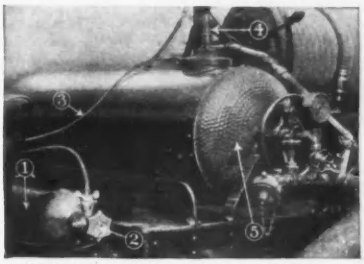
Now You Can Have All the Advantages of a Booster Pump at a Fraction of the Cost

Fire departments, equipped with 40-gallon chemical tanks, now can eliminate the mess and trouble of recharging with chemicals. The new Kidde 40-gallon tank conversion supplies the pressure for discharging chemical tanks and makes recharging an easy matter.

The Kidde conversion consists of a cylinder of compressed carbon dioxide gas which is connected to the 40-gallon tank by means of small bore hose. To operate it, you open the valve on the conversion cylinder and discharge gas into the 40-gallon tank until the pressure gauge shows the pressure you want. Then, when you open the water valve, you will get a hose stream with better range than you ever had before.

To recharge, you simply fill the 40-gallon tank with water. One charge of gas in the conversion will empty a 40-gallon tank 4 to 6 times. A recharge for the conversion cylinder costs no more than one soda and acid charge. Conversions are available for both single or double tanks and can be easily installed by any mechanic.

Send for the FREE folder, "Modern Equipment for Modern Fire Departments."



1. Kidde Conversion cylinder of gas. 2. Valve Controlling gas. 3. Hose connecting conversion and tank. 4. Safety valve. 5. Forty gallon tank.

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WALTER KIDDE & COMPANY, INC.
BLOOMFIELD . . . NEW JERSEY

Manufacturers of LUX Carbon Dioxide (CO_2) Extinguishers and Kidde Pure Water Extinguishers.

A copy of this cartoon, autographed by Ed Wynn, the Texaco Fire Chief, will be sent to you with the compliments of The Texas Company, makers of Texaco Fire-Chief Gasoline. Please address your request to The Texas Company, Room 1806, 135 East 42nd Street, New York, N. Y. Be sure to indicate the room number.

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